

REMARKS

This Amendment amends claims 1 and 6 in accordance with the original disclosure. Support for the amendment to claim 1 is found, for example, in Fig. 1 and in the specification at paragraphs 0007, 0010, and 0020. Support for the amendment to claim 6 is found, for example, in Fig. 1 and paragraph 0012. Claims 1-3 and 5-20 remain in this application.

Rejections Under 35 U.S.C. § 103

Claims 1-3 and 5-20 stand rejected under 35 U.S.C. § 103(a) for obviousness over the teachings of JP 2002-265191 (hereinafter "JP '191") in view of U.S. Patent No. 6,668,957 to King. In view of the above amendments and the following remarks, reconsideration of these rejections is respectfully requested.

Claim 1, as amended, is directed to a fork lift truck comprising a chassis and a battery block inside the chassis. The chassis has a lateral opening for removal of the battery block in a substantially lateral direction. The chassis includes a beam to which a bending load can be applied. The beam is located on an upper side of the lateral opening of the chassis. The chassis is at least partly open on the bottom underneath the battery block and the space underneath the battery block is at least partly free of load-bearing chassis components. Contact points for the battery block are located on the chassis underneath the battery block. The space between a forward contact point and a rear contact point is free of load-bearing chassis components.

JP '191 discloses a frame structure for an industrial vehicle in which a basic fork lift chassis can be manufactured and a reinforcing plate 10 can be attached depending upon how the battery is to be removed. In Figs. 3 and 4, the reinforcing plate 10 can be bolted in place by nuts and bolts (15, 16) in a first configuration between two side walls 13 and 14 of the battery compartment 7 if the battery is to be vertically removed (Fig. 3). Alternatively, the reinforcing plate 10 can be bolted in place (15, 16) in a second position between the side walls 13 and 14 if the battery block is to be removed laterally (Fig. 4).

King is directed to a vehicle battery support platform 20 which, as shown in Figs. 1, 3, 6, and 7, comprises support rails 22, 24, and 26 mounted below the vehicle frame rails 10 and 12 by vertical members 42, 44, 46, 48, 50, and 52. Thus, the battery support platform 20 is formed outboard of the frame rail 10. Additionally, as shown in Fig. 7, the

support rails 22, 24, and 26 include outer retaining flanges 61 to retain a battery box 20 in position between the vehicle frame rail 10 and the outside edge of the vehicle (Fig. 7 and column 3, lines 56-64).

Firstly, Applicant respectfully disagrees with the Examiner's combination of the JP '191 and King references. JP '191 is directed to a conventional fork lift truck and chassis. As is common in fork lift trucks, the battery compartment and battery block are located between the lateral sides of the vehicle. That is, the battery block is positioned between the left and right side support elements or rails of the vehicle. Conversely, King is directed to a battery support platform 20 which hangs below the lateral support rails 10 and 12 (column 2, lines 33-35) and which is positioned outboard or outwardly of one of the side support rails 10 (Fig. 7 and column 3, lines 56-64). Applicant does not believe one of ordinary skill in the fork lift art would look to the King reference for modifying a conventional fork lift truck. Additionally, even if such an amendment were made, it would result in the battery compartment being positioned outwardly of the vehicle longitudinal supports, not between such supports. There is no teaching or suggestion in King or JP '191 to make such a combination.

Additionally, even if the JP '191 and King combination were made, it would not result in the structure as set forth in amended claim 1. Specifically, neither JP '191 nor King, either alone or in combination, fairly teaches or suggests the fork lift truck as claimed in claim 1 in which the beam to which the bending load can be applied is located on an upper side of the lateral opening and the truck has battery block contact points (8) located on the chassis underneath the battery block, with the space between a forward contact point and a rear contact point being free of load-bearing chassis components. In JP '191, each of the illustrated embodiments has some chassis component extending along the lower, outer side of the battery compartment. The King outboard battery support platform does not overcome the deficiencies of JP '191. In the present invention, because the space underneath the battery block remains free of load-bearing chassis components, it is possible to lift the battery block and extract it using a pallet truck. Thus, the claimed structure provides a fork lift truck in which the lateral support segment on the side of the lateral battery block opening does not impede insertion or removal of the battery block. Therefore, claim 1, as amended, is believed patentable over the cited prior art and in condition for allowance. Reconsideration of the rejection of claim 1 is respectfully requested.

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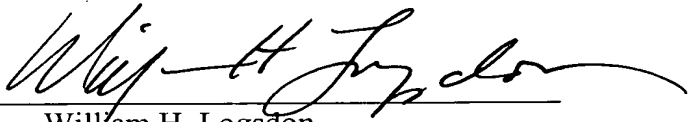
Claims 2, 3, and 5-20 depend either directly or indirectly from, and add further limitations to, claim 1. Since these claims depend from a claim believed to be in condition for allowance, these claims are also believed to be in condition for allowance. Additionally, claim 6 includes the limitation that the rear portion of the beam is connected directly with a rear counterweight of the fork lift truck. As set forth in paragraph 0012 of the specification, this advantageously provides that forces acting on the beam can be transmitted directly into the rear counterweight, and not into the vehicle framework. This limitation is neither taught nor suggested in JP '191 or King. Therefore, reconsideration of the rejections and allowance of dependent claims 2, 3, and 5-20 are respectfully requested.

Conclusion

In view of the above amendments and remarks, claims 1-3 and 5-20, as amended, are believed patentable over the cited prior art and in condition for allowance. Reconsideration of the rejections and allowance of claims 1-3 and 5-20 are respectfully requested.

Respectfully submitted,

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